AMENDMENT

Please amend this application as follows:

IN THE CLAIMS

1. (Thrice Amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) the nucleotide sequence as set forth in SEQ ID NO: 1;

(b) a nucleotide sequence encoding the polypeptide set forth in SEQ ID NO: 2; and

(c) a nucleotide sequence fully complementary to either of (a) or (b).

2. (Thrice Amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide that is at least ~~95~~ ~~90~~ 95 percent identical to the polypeptide set forth in SEQ ID NO: 2, wherein the encoded polypeptide has ~~at least 1,649 amino acids and has human~~ E3α ubiquitin ligase activity of the polypeptide set forth in SEQ ID NO: 2; and

(b) ~~a nucleotide sequence encoding an allelic variant or splice variant of the nucleotide sequence as set forth in SEQ ID NO: 1, encoding a polypeptide that has human E3α ligase activity of the polypeptide set forth in SEQ ID NO: 2;~~

~~(c)~~ a nucleotide sequence fully complementary to ~~any of~~ (a) ~~(b)~~.

3. (Thrice Amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide set forth in SEQ ID NO: 2 with ~~at least~~ a substitution of one to 100 ~~conservative~~ amino ~~acid~~ acids ~~substitution~~, wherein the polypeptide has ~~human~~ E3α ubiquitin ligase activity of the polypeptide set forth in SEQ ID NO: 2;

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~~(b) a nucleotide sequence encoding a polypeptide set forth in SEQ ID NO: 2 with at least an insertion of one to 100 amino acid acids insertion, wherein the polypeptide has human E3α ubiquitin ligase activity of the polypeptide set forth in SEQ ID NO: 2, and optionally comprises a truncation and/or deletion up to about 100 amino acids;~~

~~(c)~~ a nucleotide sequence encoding a polypeptide set forth in SEQ ID NO: 2 with ~~at least an internal~~ deletion of one to 100 amino ~~acid~~ acids ~~deletion~~, wherein the polypeptide has ~~human~~ E3α ubiquitin ligase activity of the polypeptide set forth in SEQ ID NO: 2;

~~(d)~~ a nucleotide sequence encoding a polypeptide set forth in SEQ ID NO: 2 which has a C- and/or N-terminal truncation up to about 100 amino acids, wherein the polypeptide has ~~human~~ E3α ubiquitin ligase activity of the polypeptide set forth in SEQ ID NO: 2;

~~(e)~~ a nucleotide sequence encoding a polypeptide set forth in SEQ ID NO: 2 with ~~at least~~ a modification of one to 100 amino acids ~~modification~~ selected from the group consisting of amino acid substitutions, amino acid insertions, amino acid deletions, C-terminal truncation, and N-terminal truncation, wherein the polypeptide has ~~human~~ E3α ubiquitin ligase activity of the polypeptide set forth in SEQ ID NO: 2; and

~~(f)~~ a nucleotide sequence fully complementary to any one of (a)-(e).

4. (Amended) A vector comprising the nucleic acid molecule of any one of claims 1, 2, or 3.

5. (Original) A host cell comprising the vector of claim 4.

6. (Original) The host cell of claim 5 that is a eukaryotic cell.

7. (Original) The host cell of claim 5 that is a prokaryotic cell.

8. (Amended) A process of producing a ~~huE3α~~ ~~human~~ E3α ubiquitin ligase polypeptide comprising culturing the host cell of claim 5 under suitable conditions to express the polypeptide~~, and optionally isolating the polypeptide from the culture~~.

9 ~~10~~. (Amended) The process of claim 8, wherein the nucleic acid molecule comprises promoter ~~DNA other than the promoter DNA for the native huE3α human E3α ubiquitin ligase polypeptide~~ operatively linked to the DNA encoding the ~~huE3α human E3α~~ ubiquitin ligase polypeptide, wherein said promoter is not native human E3α ubiquitin ligase promoter.

11. (Original) The isolated nucleic acid molecule according to claim 2 wherein the percent identity is determined using a computer program selected from the group consisting of GAP, BLASTP, BLASTN, FASTA, BLASTA, BLASTX, BestFit, and the Smith-Waterman algorithm.

10 ~~46~~. (Amended) A composition comprising a nucleic acid molecule of any one of claims 1, 2, or 3 ~~and a pharmaceutically acceptable formulation agent~~.

47. (Original) A composition of claim 46 wherein said nucleic acid molecule is contained in a viral vector.

12 ~~48~~. (Amended) A viral vector comprising a nucleic acid molecule of any one of claims 1, 2, or 3.

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~~59~~. (Thrice Amended) A reagent comprising a detectably labeled ~~polynucleotide encoding the amino acid sequence set out in SEQ ID NO: 2; or allelic variants or splice variants thereof with human E3α ligase activity~~ nucleic acid molecule according to any one of claims ~~1 to 3~~ 1, 2 or 3.

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~~61~~. (Twice Amended) A method for determining the presence of ~~huE3α~~ a human E3α ubiquitin ligase nucleic ~~acids~~ acid in a biological sample comprising the steps of:

(a) providing a biological sample suspected of containing ~~huE3α~~ a human E3α ubiquitin ligase nucleic ~~acids~~ acid;

(b) contacting the biological sample with ~~a~~ the reagent according to claim 13 ~~59~~ under conditions wherein the reagent will hybridize with ~~huE3α~~ a human E3α ubiquitin ligase nucleic ~~acids~~ acid contained in said biological sample;

(c) detecting hybridization between ~~huE3α~~ the human E3α ubiquitin ligase nucleic acid in the biological sample and the reagent; and

(d) comparing the level of hybridization between the nucleic acid in the biological sample and the reagent with the level of hybridization between a known concentration of ~~huE3α~~ human E3α ubiquitin ligase nucleic acid and the reagent.

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~~62~~. (Twice Amended) A method for detecting the presence of ~~huE3α~~ a human E3α ubiquitin ligase nucleic ~~acids~~ acid in a tissue or cellular sample comprising the steps of:

(a) providing a tissue or cellular sample suspected of containing ~~huE3α~~ a human E3α ubiquitin ligase nucleic ~~acids~~ acid;

(b) contacting the tissue or cellular sample with ~~a~~ the reagent according to claim 13 ~~59~~ under conditions wherein the reagent will hybridize with ~~huE3α~~ a human E3α ubiquitin ligase nucleic ~~acids~~ acid;

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(c) detecting hybridization between ~~huE3α~~ the human E3α ubiquitin ligase nucleic acid in the tissue or cellular sample and the reagent; and

(d) comparing the level of hybridization between the nucleic acid in the tissue or cellular sample and reagent with the level of hybridization between a known concentration of ~~huE3α~~ human E3α ubiquitin ligase nucleic acid and the reagent.

63. (Original) The method of claim ~~59~~ wherein said ~~polynucleotide~~ molecule is DNA.

64. (Original) The method of claim 59 wherein said ~~polynucleotide~~ molecule is RNA.

65. (New) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) the nucleotide sequence as set forth in SEQ ID NO: 18;

(b) a nucleotide sequence encoding the polypeptide set forth in SEQ ID NO: 19; and

(c) a nucleotide sequence fully complementary to either of (a) or (b).